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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/811,355	03/16/2001	Steven R. Switzer	GODG-1610	7783
7590			EXAMINER	
10/18/2004			ODOM, CURTIS B	
Seong-Kun Oh			ART UNIT	
Sierra Patent Group, Ltd.			PAPER NUMBER	
P.O. Box 6149			2634	
Stateline, NV 89449			DATE MAILED: 10/18/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

Application No.

Applicant(s)

09/811,355

SWEITZER, STEVEN R.

**Office Action Summary**

Examiner

Art Unit

Curtis B. Odom

2634

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,3-5,7,8 and 19 is/are allowed.
- 6) ☒ Claim(s) 2,6,9-18,20 and 21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 March 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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## **DETAILED ACTION**

### ***Drawings***

1. New corrected drawings are required in this application because the handwritten reference character and numerals make the illustrations difficult to interpret. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

### ***Claim Objections***

2. Claim 18 is objected to because of the following informalities:
- a. The phrase "the time period" is suggested to be changed to "a time period".
  - b. The phrase "the reception" is suggested to be changed to "a reception".

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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4. Claims 2, 6, 10, 13, and 16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claims 2, 6, 10, 13, and 16 recite the claim limitations “B/Bbar signal” and “A/Abar signal”. However, after reviewing the specification, there is no clear/concise definition or function describing a “B/Bbar signal” or “A/Abar signal” which would enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The examiner also searched the U. S. Patent and IEEEExplore databases, but could not find a definition or function for a “B/Bbar signal” or “A/Abar signal”.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 9, 12, 15, 17, 18, 20, and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Scott (U. S. Patent No. 5, 953, 658).

Regarding claim 9, Scott discloses a method of altering a round trip delay measurement in a communication system, comprising the steps of:

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monitoring (Fig. 1, block 10, column 8, lines 58-64) an upstream data transmission path for a predetermined tone sequence (tone A phase reversal signal);

generating (Fig. 1, block 10, column 8, line 62-column 9, line 6) an artificial delay signal (signal delay of 30 ms) upon detecting the predetermined tone sequence, the artificial delay signal being shorter than an actual delay signal (predetermined signal delay of  $40 \pm 1$ ); and

introducing (Fig. 1, block 10, column 9, lines 6-16) a phase reversal (tone B phase reversal) in the downstream data transmission path.

Regarding claim 12, Scott discloses an apparatus (Fig. 1) for altering a round trip delay measurement in a communication system, comprising:

a detector (Fig. 1, block 10, column 8, lines 58-64) for monitoring an upstream data transmission path for a predetermined tone sequence (tone A phase reversal signal);

a delay unit (Fig. 1, block 10, column 8, line 62-column 9, line 6) for generating an artificial delay signal (signal delay of 30 ms) when the predetermined tone sequence is detected, the artificial delay signal being shorter than an actual delay signal (predetermined signal delay of  $40 \pm 1$ ); and

a phase reversal unit (Fig. 1, block 10, column 9, lines 6-16) for providing a phase reversal in the downstream data transmission path (tone B phase reversal).

Regarding claim 15, Scott discloses round trip delay measurement method, comprising the steps of

monitoring (Fig. 1, block 10, column 8, lines 58-64) a downstream data transmission path for a predetermined tone sequence (tone A phase reversal signal);

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generating (Fig. 1, block 10, column 8, line 62-column 9, line 6) a delay signal (signal delay of 30 ms) upon detecting the predetermined tone sequence; and

introducing (Fig. 1, block 10, column 9, lines 6-16) a phase reversal in an upstream data transmission path (tone B phase reversal).

Regarding claim 17, which inherits the limitations of claim 16, Scott discloses transmitting the predetermined tone sequence and receiving the phase reversal (Fig. 1, block 26, column 8, line 58-column 9, line 15).

Regarding claim 18, which inherits the limitations of claim 17, Scott discloses the round trip delay includes a time period for the transmission of the tone sequence to the reception of the phase reversal (column 9, lines 6-15).

Regarding claims 20 and 21, the claimed apparatus includes features corresponding to subject matter mentioned in the above rejection of claims 12 and 15 which is applicable hereto.

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 11 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scott (U. S. Patent No. 5, 953, 658).

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Regarding claims 11 and 14, Scott discloses all the limitations of claims 11 and 14 (see rejection of claims 9 and 12), except the communication system includes a pair gain system. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made that pair gain systems are well known in the art and enable signals to be transmitted at a high rate, over longer distances, and with increased quality. Pair gain systems also provide the additional benefit of enabling multiple subscriber lines to be served by a single twisted pair line. Thus, it would have been obvious to include a pair gain system in the communication system; therefore, claims 11 and 14 do not constitute patentability.

#### *Allowable Subject Matter*

9. Claims 1, 3-5, 7, 8, and 19 are allowable over prior art references because related references do not disclose a method/apparatus of altering a round trip delay measurement in a communication system, comprising receiving a signal; determining whether a predetermined tone sequence is detected; and processing the signal and generating a corresponding digital signal; wherein when the tone sequence is detected, routing the processed signal to an output terminal, and further, wherein if the tone sequence is not detected, routing the original signal to the output terminal.

#### *Conclusion*

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10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Abdelilah et al. (U. S. Patent No. 6, 661, 837) discloses a method of measuring round trip delay by compensating for the improper reception of a tone sequence.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Curtis B. Odom whose telephone number is 571-272-3046. The examiner can normally be reached on Monday- Friday, 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 571-272-3056. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Curtis Odom  
October 13, 2004

  
**STEPHEN CHIN**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2800**